SITUATION REPORT NO. 4 FINAL REPORT INCIDENT NO. 99-068

DATE: August 27, 1999 TIME: 12:00 p.m.

TO: Governor Edward T. Schafer State Capitol Bismarck, ND 58505

- 1. NATURE OF DISASTER: Severe Summer Storms -- Heavy rainfall associated with severe summer storms that struck the state on August 11-12 and August 15 caused street flooding, sewer backup and basement flooding. The additional rainfall compounded problems with high water tables as excess precipitation caused flooding of infrastructure and homes.
- 2. DEATHS AND INJURIES: No deaths or injuries have been reported.
- 3. <u>DAMAGES</u>: Officials for the Three Affiliated Tribes have reported that 20 to 30 homes were damaged during an August 12 storm. A severe thunderstorm, with winds in excess of 60 miles per hour (mph) and rainfall of three inches, struck the Twin Buttes and White Shield areas. Basements flooded, sewers backed up, and water began seeping through light fixtures. A chimney collapsed. Crop and tree damages were also reported.

Staff for Bismarck/Burleigh County Emergency Management was forced to relocate after significant ground water damaged office space, saturating carpets and causing mold-related problems. To date, staff members have received reports of more than 221 homes and businesses that received water damages during the August 12 storm. Recent damage reports included flooded basements, water seepage, and damages to carpet, paneling, sheetrock and walls. A drainage system on Franklin Avenue, midway between Hamilton and Valley Forge avenues, received approximately \$10,000 in damages.

During the August 12 storm, rainfall amounts in Bowman County ranged from five inches south of Rhame, 2.5 inches northwest of Rhame, three inches north of Scranton, 6.5 inches northeast of Scranton and approximately three inches in the city of Scranton. Winds speeds reached 45 to 50 miles per hour (mph), and hail was reported at pea- to marble-size with heavy accumulations 14 miles north of Bowman to Adams County. Bowman County Emergency Management staff reported minor road flooding occurred, but no substantial damages to roadbeds. Slope Electric lost power to some of its rural customers northeast of Scranton, but crews had returned power by the following day.

The local U.S. Department of Agriculture (USDA) emergency board for Bowman and Slope Counties have reported crop damages from the August 12 storm. The Bowman County boards places percent of yield loss for 25,000 acres of wheat, barley, safflowers, sunflowers, peas and canola at 75 percent. In Slope County, approximately 18,000 acres of wheat, sunflowers and pasture and rangeland

were impacted. Percent of yield losses ranged from 1 percent for pasture and rangeland to 60 percent for sunflower crops and 80 to 100 percent for wheat crops.

In Ransom County, an August 15 tornado downed or damaged more than 100 trees at the Fort Ransom State Park.

An August 15 storm, characterized by golfball-sized hail and winds in excess of 70 mph, caused crop damages in Slope, Billings, Stark and McLean Counties. Approximately 65,800 acres of cropland were impacted in Slope County, the local USDA board has reported. Percent of yield losses range from 30 to 80 percent for wheat, peas, canola, sunflowers, corn and barley. In Billings County, percent of yield losses range from 70 to 100 percent for 20,500 acres of wheat, mustard and oats. The Billings County emergency board places damages to 30 farm homes and service buildings at \$19,500 and to 20 pieces of farm machinery and equipment at \$4,000. In Stark County, percent of yield losses also ranged from 70 to 90 percent for 47,460 acres of wheat, canola, mustard and oats. The Stark County USDA emergency board places damages to 100 farm homes and service buildings at \$65,000 and \$16,000 for 80 pieces of farm machinery and equipment. In McLean County, percent of yield losses ranged from 50 to 70 percent for 115,654 acres of barley, canola, corn, flax, oats, sunflowers, wheat and hayland. One barn and one Quonset were lost because of tornadic conditions. Fences also were damaged during the storm.

The National Weather Service (NWS) issued warnings for heavy rains and a tornado on August 22 when a narrow storm band moved into Dickey County. A tornado watch was issued, and later an advisory indicating golfball-sized hail and heavy rain. Radar detected a rotation in the system, and a tornado warning was issued for the Merricourt, Monango and Ellendale areas. The warning was canceled approximately 15 minutes after it was issued. Wind speeds were recorded at 45 mph at the leading edge of the storm. Rain amounts ranged from nearly 1 inch in Ellendale to 1.5 inches, 10 miles west of the city. No rainfall occurred in the eastern part of the county or in the hills west of Ellendale.

An August 22 storm also impacted Griggs County where crop damages to 6,120 acres of sunflower, durum, edible beans, swathed canola and wheat were limited to 0.5 to 3 percent loss of yield.

Two areas of Steele County were impacted by the August 22 storm, including one 6,400-acre area east of Sharon and another 19,200-acre area three miles east of Blabon. Percent of yield losses only ranged from 0.5 to 1 percent for 6,000 acres of edible beans, sunflowers, soybeans and flax, the USDA board reported. Hail caused minor building damage.

A storm with high winds, pea-sized hail and heavy rain passed through Walsh County on August 22, primarily impacting residents living in the northern portion of the city of Minto. Several trees were blown over or branches were broken. One tree fell onto a garage. Staff for the Minto Ag Center reported that the north wall of a 50-foot by 54-foot building was blown out and a rollup door, located on the west side of the building, was destroyed. Winds blew the siding off a rural farmhouse, located 3.5 miles west of Minto.

4. RESOURCES:

LOCAL: Staff from the North Central Human Service Center assisted with a Preliminary Damage Assessment (PDA) conducted at the Three Affiliated Tribes of the Fort Berthold Reservation. Public works and engineering staff in the two counties and reservation also assisted with the PDA.

<u>STATE</u>: Staff for the N.D. Department of Human Services assisted with the PDA in Kidder and Burleigh Counties.

<u>FEDERAL</u>: The Federal Emergency Management Agency (FEMA) provided assistance for the PDA.

- 5. <u>VOLUNTEER ACTION</u>: In Bowman County, amateur Skywarn volunteers provided assistance with tracking the August 12 storm. Radar operators, meteorologists and aircraft crews from Weather Modification Inc. kept spotters informed of the storm's intensities and movement changes.
- 6. MAJOR ACTIONS: Preliminary damage assessments for Burleigh and Kidder Counties, along with the Three Affiliated Tribes of the Fort Berthold Indian Reservation, indicate there are not enough damages to warrant requesting a federal disaster declaration. All three areas were declared local emergencies after heavy rains and storms moved across the state August 11-12 and August 15. Assessment teams consisting of local, state and federal officials surveyed damages to individual dwellings and public infrastructure. Because no federal aid is available, individuals with damages are being referred to the Home Program administered by Community Action Agencies, health districts, the Salvation Army and other participating agencies in the N.D. Volunteer Organizations Active in Disaster.

The Kidder County Board of Commissioners issued a disaster declaration in response to problems related to storm conditions on August 11-15.

- 7. ASSISTANCE NEEDED: None reported at this time.
- 8. OUTSIDE HELP ON SCENE: None reported at this time.
- 9. <u>OTHER</u>: Situation Reports published by the N.D. Division of Emergency Management are posted on the Division's Internet Home page. The address is: http://www.state.nd.us/dem.

			_
Douglas C.	Friez,	State Di	ector